

In the Claims

Applicant has submitted a new complete claim set indicating marked up claims with insertions and deletions indicated by underlining and strikeouts, respectively.

Please amend the claims as follows. Please add new claims 47-50 as noted below.

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1. (currently amended) An isolated nucleic acid molecule selected from the group consisting of
- (a) nucleic acid molecules that code for the amino acid sequence of SEQ ID NO:2, SEQ ID NO: 23, SEQ ID NO: 25, or SEQ ID NO: 27,
 - (b) ~~allelic variants of (a), wherein the allelic variants exclude SEQ ID NO:3 and SEQ ID NO:5, and~~
 - (c) complements of (a) ~~or (b).~~
2. (original) The isolated nucleic acid molecule of claim 1, wherein the isolated nucleic acid molecule codes for SEQ ID NO:2.
3. (original) The isolated nucleic acid molecule of claim 1, wherein the isolated nucleic acid comprises the nucleotide sequence of SEQ ID NO:1.
4. (original) The isolated nucleic acid molecule of claim 1, wherein the isolated nucleic acid comprises the coding region of SEQ ID NO:1.
5. (currently amended) The isolated nucleic acid molecule of claim 1, wherein the ~~allelic variants are~~ isolated nucleic acid molecules ~~that code for an amino acid~~ comprises a nucleotide sequence selected from the group consisting of SEQ ID NO:23 22, SEQ ID NO:25 24 and SEQ ID NO:27 26.
- 6-17. (cancelled)

18. (currently amended) An isolated nucleic acid molecule which encodes ~~the~~ an isolated P-glycoprotein polypeptide or fragment thereof ~~of claim 14~~ having P-glycoprotein activity wherein the isolated P-glycoprotein polypeptide or fragment thereof comprises at least one amino acid of a dog P-glycoprotein selected from the group consisting of amino acids 25, 192, 197, 212, 288, 329, 532, 696, 1273 and 1355 of SEQ ID NO:2; amino acid 25 of SEQ ID NO:25; and amino acids 25 and 1148 of SEQ ID NO:27.

19. (original) An expression vector comprising the isolated nucleic acid molecule of claim 1 operably linked to a promoter.

20. (original) An expression vector comprising the isolated nucleic acid molecule of claim 18 operably linked to a promoter.

21. (original) A host cell transformed or transfected with the expression vector of claim 19.

22. (original) A host cell transformed or transfected with the expression vector of claim 20.

23-46. (cancelled)

47.(new) An isolated nucleic acid molecule which encodes an isolated P-glycoprotein polypeptide or fragment wherein the isolated P-glycoprotein polypeptide or fragment thereof comprises at least one amino acid of a dog P-glycoprotein selected from the group consisting of amino acids 3, 6, 8, 10, 12, 14-26, 36, 38, 48, 52, 56, 64, 74, 78, 84-92, 94, 96, 98, 99, 101, 103, 104, 106, 108, 112, 115, 147, 187, 197, 199, 233, 288, 321, 326, 347, 397, 450, 454, 455, 467, 472, 520, 633, 637, 643, 644, 650, 657, 658, 661, 666, 667, 674-677, 679, 685, 689, 691, 693, 694, 703, 707, 717, 731, 736, 740, 744, 745, 756, 759, 763, 853, 914, 920, 942, 943, 946, 968-970, 972, 974, 983, 1005, 1010, 1017, 1025, 1026, 1029, 1040, 1095, 1098, 1105, 1144, 1148, 1149, 1158, 1162, 1165, 1168, 1170, 1252 and 1279 of SEQ ID NO:2; and amino acid 329 of SEQ ID NO:27, wherein the P-glycoprotein is identical to a human P-glycoprotein except for the at least one amino acid of a dog P-glycoprotein.

48. (new) The isolated nucleic acid molecule of claim 47, wherein the human P-glycoprotein is selected from the group of SEQ ID NO:7 and SEQ ID NO:8.

B 49. (new) An expression vector comprising the isolated nucleic acid molecule of claim 47 operably linked to a promoter.

50. (new) A host cell transformed or transfected with the expression vector of claim ~~49~~.
